

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P282475

Luminaire Tested: **LDA2B059030D010 EU2B05SP159030 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B059030D010 EU2B05SP159030 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 642.3 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

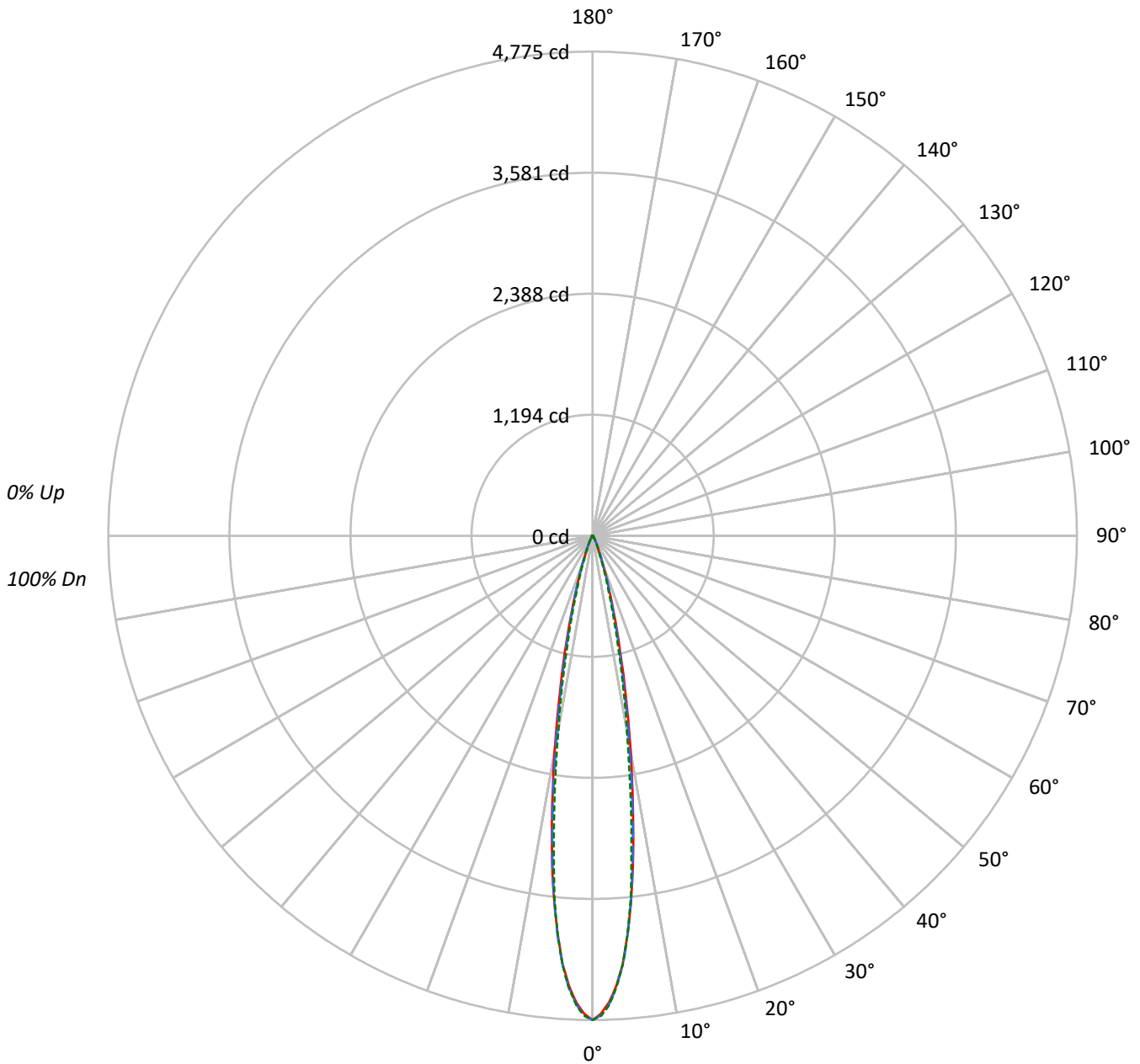
Input Watts (W): 7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	98	99	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2355951	2355951	2355951
5°	1954490	1960829	1953400
10°	1081750	1042674	971286
15°	437879	418828	371889
20°	146692	155565	125953
25°	55797	56015	53021
30°	25009	24610	23813
35°	12106	10781	8613
40°	8050	10111	7084
45°	2023	3349	3070
50°	537	844	1151
55°	5075	4387	6967
60°	7203	5822	9374
65°	3385	8989	8522
70°	3173	2596	3173
75°	1334	3431	9722
80°	16763	23013	20740
85°	0	10189	12454



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.8	48.7
10°-20°	236.9	36.9
20°-30°	53.8	8.4
30°-40°	15.9	2.5
40°-50°	5.3	0.8
50°-60°	4.7	0.7
60°-70°	5.6	0.9
70°-80°	3.6	0.6
80°-90°	3.8	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	603.5	94.0
0°-40°	619.4	96.4
0°-60°	629.4	98.0
0°-90°	642.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4775	4775	4775	4775	4775	
5°	3946	3978	3959	3908	3944	316
15°	857	869	820	743	728	249
25°	102	110	103	102	97	54
35°	20	22	18	21	14	16
45°	3	8	5	8	4	4
55°	6	8	5	8	8	2
65°	3	6	8	7	7	3
75°	1	3	2	3	5	2
85°	0	0	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4775.3	4775.3	4775.3	4775.3	4775.3
1°	4713.7	4732.8	4730.9	4723.3	4736.8
2°	4605.3	4628.4	4626.2	4609.4	4633.5
3°	4446.4	4466.9	4463.6	4439.4	4465.8
4°	4234.0	4257.4	4248.3	4212.0	4245.7
5°	3946.5	3977.6	3959.3	3907.7	3944.3
6°	3627.9	3654.2	3625.3	3556.8	3592.7
7°	3271.2	3287.6	3249.5	3161.7	3137.5
8°	2881.9	2903.5	2850.4	2747.8	2721.4
9°	2509.8	2517.1	2452.6	2343.5	2310.2
10°	2159.3	2153.8	2081.3	1970.7	1938.8
11°	1827.1	1819.8	1743.2	1641.1	1651.3
12°	1525.0	1539.3	1450.3	1357.6	1359.4
13°	1276.7	1278.1	1201.6	1113.3	1108.2
14°	1045.2	1058.8	993.2	914.1	899.5
15°	857.3	869.1	820.0	743.1	728.1
16°	686.3	701.0	665.8	596.2	576.4
17°	552.6	571.3	548.2	490.0	467.3
18°	442.0	456.3	450.8	390.8	372.1
19°	349.0	368.8	370.3	320.1	297.7
20°	279.4	297.4	296.3	257.5	239.9
22.5°	160.4	169.9	170.3	152.0	141.7
25°	102.5	110.2	102.9	101.8	97.4
26°	89.0	95.2	87.2	87.2	83.1
27°	72.1	77.6	69.9	73.2	67.8
28°	60.8	66.7	60.1	59.3	58.6
29°	50.5	56.0	47.6	51.3	49.1
30°	43.9	48.0	43.2	48.7	41.8
32.5°	34.1	37.4	28.9	36.6	27.5
35°	20.1	22.3	17.9	20.9	14.3
37.5°	20.9	21.6	19.4	21.6	20.1
40°	12.5	12.8	15.7	15.7	11.0
42.5°	11.7	11.4	7.0	11.0	8.8
45°	2.9	8.4	4.8	8.4	4.4
47.5°	2.2	2.9	2.9	5.9	5.9
50°	0.7	2.9	1.1	2.2	1.5
52.5°	0.0	7.0	1.5	5.1	4.4
55°	5.9	8.4	5.1	7.7	8.1
57.5°	0.7	5.9	2.9	6.2	4.4
60°	7.3	9.9	5.9	10.6	9.5
62.5°	0.7	6.6	7.7	5.9	5.1
65°	2.9	6.2	7.7	7.3	7.3
67.5°	3.7	6.2	4.8	4.8	6.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.7	2.6	1.8	3.3	5.1
77.5°	0.7	2.9	2.6	5.9	4.4
80°	5.9	6.6	8.1	10.6	7.3
82.5°	5.1	5.1	8.1	5.9	4.4
85°	0.0	0.0	1.8	1.8	2.2
87.5°	0.0	1.5	3.7	2.9	5.1
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







70°	2.2	0.7	1.8	1.8	2.2
72.5°	0.7	3.3	2.9	1.8	3.7



(END OF REPORT)